BRITISH AVIATION PROGRESS

Mass Production of Fairey Battle Bombers: Canada's Huge Traffic

FROM OUR OWN AVIATION CORRESPONDENT

London, June 12.

Glimpses of what the capacity of British aeroplane manufacturing now is were obtainable this week when, in conjunction with the opening of a new assembly shed, the Fairey aviation works at Stockport were opened to inspection.

Here in a continuous stream are being produced numbers of the new Fairey Battle medium bombers, believed to be the fastest single engine bombers ever supplied to the R.A.F. They are fitted with 1,000 h.p. Rolls Royce Merlin engines, and are of all metal construction, with retractable under carriages, wing flaps, variable-pitch airscrews, and every conceivable instrument necessary to aid the pilot. Their manœuvring qualities are almost miraculous.

But perhaps the most impressive part of the display was the ingenuity in planning which has made it possible to turn out such numbers of aeroplanes as it were by mass production. How many Battles have been ordered is a secret, but there were 300 under construction in the works, so arranged that as part of one is finished, another instantly takes its place. With this, the most extreme care has been taken to ensure accuracy, the result being that each machine is as perfect as if it had been singly built.

The Merlin's Power

Details now available of the first performances of the Merlin engine just mentioned are very impressive. It is a liquid-cooled 12-cylinder fully supercharged engine, planned to operate with variable-pitch airscrews, both with the British constant speed airscrews that provide nearly ideal running conditions for the engine. Provision is made for tapping the lubricating oil system to provide hydraulic power needed to turn the airscrew blades.

Statistics given out by the Air Ministry show that the international power rating of the Merlin is 990 h.p. (1.004 c. v.) at 12,000 feet, and its maximum output 1,050 h.p. Net dry weight of the engine is 1,318½ lb. and its weight/power ratio, therefore, is only 1.25 lb./h.p. at normal maximum output—an extremely low figure for a liquid-cooled engine designed for the long service and troublefree running that are characteristic of British aero engines. Its total cylindrical capacity is 27 litres, which means that the engine at full power turns out nearly 40 h.p. per litre. It is cooled by ethylene-glycol, a mixture which enables engines to run at temperatures considerably higher than that of boiling water, and thereby to perform more efficiently. Further, a smaller quantity of the mixture is required for effective cooling than in the equivalent water-cooled engine, with consequent saving in head resistance and weight. Merlin engines in the new warplanes are designed to work with "ducted" radiators, the British invention that has markedly lessened the head resistance of powerful engines.

"Five Miles a Minute" Warplanes

Among the aircraft powered by the Merlin, besides the Fairey Battle, are the Hawker Hurricane and Supermarine Spitfire single-seat fighters, two "300 m.p.h. plus" aircraft ordered in great numbers for air defence. Both are low-wing monoplanes of exceptionally clean lines with retractile undercarriage and all-enclosed cockpit.

The Battle, by the way, easily attains a speed of 250 to 300 m.p.h. and even greater speeds are within its capacity.

The Merlin's immediate forerunner was the Kestrel, which has been supplied to the R.A.F., three Dominions and seventeen foreign countries. More than 4,000 Kestrels are in use all over the world.

The Kestrel completed its first official type-test in 1927. Before it was put into production in 1928 a reduction gearing to link engine with airscrew in the place of direct drive was added. In subsequent years, as the demands of aircraft constructors and the needs of military and naval aviation for more power at heights far above sea-level became more insistent, low and high level superchargers were added, and different reduction gear ratios made available, till at present the basic Kestrel engine is produced in twelve varieties.

Concurrently, the power output has enormously increased. The F.X. unit gave 480 h.p. at sea-level; the Kestrel XVI gives 745 h.p. at a height of 14,500 ft., but is not one cubic centimetre more in cylindrical capacity than the first engine.

Records to Regain

Apropos of the speed of the newest R.A.F. machines, Major Turner, the "Daily Telegraph's" aviation correspondent, points out that Great Britain might easily regain the world air records for height, speed and distance measured as a straight line which she did hold, but has recently lost.

Other countries, notably Italy and the United States, apparently attach more importance to these records as a means for increasing prestige and, indirectly, their chances in world markets, says Major Turner.

The land aeroplane record over the 3-kilometre course, flown in each direction, is held by the United States, with a flight by Mr. H. Hughes, at a speed of 352 miles an hour. This record could be taken by two, or possibly three, of the new R.A.F. Flighter types.

The world aeroplane distance record is held by the French pilots, Rossi and Codos, with a flight of 5,656 miles from New York to Rayak, in Syria.

This record could be taken by one of the new R.A.F. bombers, and that without very much special adaptation.

In altitude, Sqdrn.-Ldr. F. R. D. Swain's record of 50,000 feet was beaten by the Italian, Lt.-Col. Mario Pezzi, Chief of the Italian Air Force High Flying Section, by a flight to 51,348 feet.

There is little doubt that Sqdrn.-Ldr. Swain's altitude could be beaten by a considerable margin with the air-cooled Bristol engine used by him. A new attempt is already being prepared and will probably be made by Flt.-Lt. M. J. Adam.

[It will be seen in another column that Lieut. Adam broke this record. —Ed.].

It apparently only depends on an order, or permission by the Air Ministry to recover these records for Great Britain.

Death of a Master Designer

The death is announced to-day of Mr. Reginald Joseph Mitchell at the untimely age of only 42, for whom it may fairly be claimed that he was the world's greatest designer of high-speed aeroplanes. He designed the Schneider Trophy planes of 1922, '27, '29 and '31, when he competed against the pick of the world and beat them. His Supermarine monoplanes were in their day the fastest vehicles in the world, and the new Supermarine Spitfire is also his design.

Mr. Mitchell was a quiet, retiring man, who would hesitate to offer an opinion even about the problems of design of which he knew more than most people, He was extraordinarily quick and resourceful, as an anecdote related by the "Morning Post" will show. It was during the trials for the Schneider Trophy, and one new machine, during a test when the speed had for the first time been forced up to the maximum, developed wing flutter, and the pilot made a forced landing. At that time the knowledge of wing flutter was negligible. It was the most dreaded trouble of all. It seemed to those who knew the secret of what had happened to that machine, that the British chances of winning the race were shattered. But Mr. Mitchell devised a solution to the problem almost by the same evening.

Mr. Mitchell was born at Stoke-on-Trent and apprenticed to Messrs. Kerr Stuart & Co., to which firm he became later on the assistant engineer. Besides small racing seaplanes and faster single-seater fighters, he was also most successful in designing large flying-boats. He joined the Vickers Supermarine Aviation Works in 1916 and in 1920, when only 25 years old was appointed its chief engineer and designer. Subsequently he became a director of the firm.

Express Freight in Canada

I alluded recently to the new records in express aerial freight and mail-carrying set up by the Canadian transport aeroplanes in 1936. Full figures compiled from the records of several companies have now reached me, and are well worth attention. The increase in freight carriage compared with 1935 was no less than 43 per cent., reaching a total of 11,272 tons, while airmail carried was 1,153,812 lb. another record.

Forty-three freight carriers returned figures included in the year's aggregate; the eight largest operators among them accounted for 19,500,000 lb. Canadian Airways led with 7,749,926 lb., followed by Starratt Airways with 3,598,000 lb. and Wings Limited with 2,231,731 lb. These three companies used between them 53 aircraft of seven different types.

Commercial aviation in Canada provides perhaps the world's best example of the benefits conferred on mankind by the aeroplane. The Dominion's immense territory and lack over large regions of adequate ground communications make it ideal for the proper development of civil flying enterprise, and Canadian air transport companies have done much to make possible the exploitation of areas that are inaccessible except by air.

Machinery by Air

Here is an example of the kind of contract that mining brings to air transport, fulfilled by Wings Ltd. An entire mining plant had to be transported a distance of 145 miles, from a terminus 325 miles east of Lake Winnipeg to a new mining site just over the Ontario boundary. The total weight of cargo involved was more than 600,000 lb., and included a mine hoist, a mine cage, sinking buckets, rock drills and steel, eight ore cars, steel rail, 60,000 lb. of dynamite, 70 workmen and their belongings, and foodstuffs weighing more than 80,000 lb.

Special air bases, with radio stations, were established at both ends of the run. Some of the machinery to be moved raised difficult problems because of its weight and bulkiness. The ore compressors, when assembled, weighed 14,000 lb., and the hoist 4,600 lb. The sub-base of the compressor was fifteen feet long; it was cut in two and provision made for reassembly at the new site. Each piece weighed half a ton. Two tractors weighed respectively 6,250 and 5,700 lb. They were taken apart, the heaviest single pieces carried in the aeroplanes being the motors, which weighed 1,800 and 1,230 lb. The contract was completed within scheduled time.

Fish Through the Sky

An interesting form of air freighting enterprise which is peculiar to Canada is the transport of fish from lakes inaccessible by surface vehicles. One company alone—United Air Transport, with headquarters at Edmonton, Alberta—reports the carriage of more than 1,000,000 lb. of fish during the past winter.

Interesting experiments were also made in the restocking of small lakes. One test involved the dropping of 1,100 speckled trout, in the form of "fingerlings" 2½ inches long. The fish were carried in cans, and while the aeroplane flew slowly over the lake they were placed in nets and dropped from a height of approximately 1,000 ft. Subsequently, 600 of the fish were recovered.

During the past seven years air freighting in Canada has grown from a few small isolated operations to become an industry engaging more than 40 operating concerns, serving vast regions in what is commonly called the "northland" where other forms of transport are for the most part impracticable and are always more expensive. This development has of course brought profound changes to the social and economic life of frontier areas from Aklavik on the extreme westerly Arctic coast of Canada to the little Magdalen Islands in the Gulf of St. Lawrence. These freighting operations frequently demand the highest levels of courage, resource and determination among pilots, engineers and other air transport personnel. Companies continue operations under weather conditions that may see the thermometer drop to 60 below zero, without the help of any but the most primitive ground organization.

Another Formidable Fighter

The third single-seat fighter to be announced among the new monoplanes is a Gloster all-metal machine of stressed skin construction which has just begun flying trials. It has an air-cooled radial engine, which may be either a Bristol Mercury poppet-valved highly supercharged, or a Perseus sleeve-valved, unit.

The new Gloster fighter is a low-wing monoplane of beautiful lines. Its undercarriage retracts backwards, and when fully withdrawn leaves part of each wheel exposed below the wings. It has a metal monocoque fuselage; except for elevators, rudder and ailerons, which are fabric-covered, the whole machine has a stressed skin of metal sheet. Hydraulically operated split flaps are fitted to the trailing edge of the wings to steepen landing glide and reduce landing speed. The engine drives a variable-pitch airscrew.

Though generally normal in appearance, the new fighter is readily distinguished from the many other types of low-wing monoplane now in construction by the unusual form of the tail, in which the vertical fin and rudder are set farther forward, relative to the tailplane, than, in the average machine. Its cantilever wings have a span of just over 38 ft. from tip to tip. It is 31 ft. long, and on the ground measures 10 ft. in height. The engine is enclosed in a ring cowling which has adjustable gills to control the flow of cooling air.

Lucullus In The Air

An American aviation company has lately announced that it is the first in America to serve full luncheons in the air.

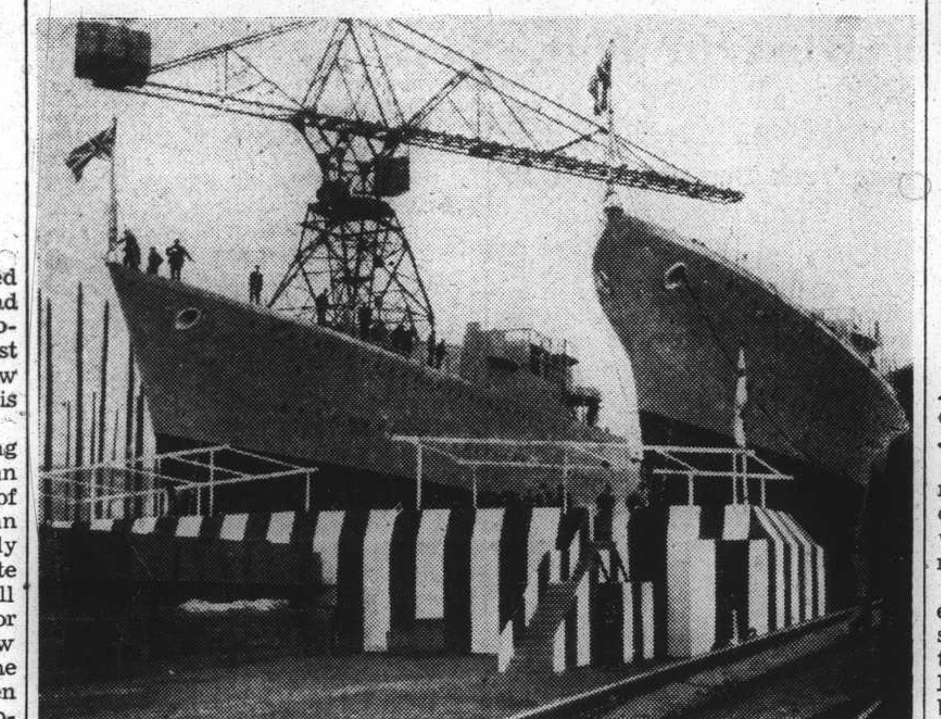
One may be forgiven for mentioning that *table d'hôte* luncheons and dinners have been served in the Imperial Airways machines between London and Paris, which are famous all over the world for their spaciousness and luxury, for six years, past.

Eighteen years ago, when the first passengers began to fly between London and Paris, they had to take up biscuits or sandwiches with them if they wanted anything to eat in the air. With the employment of larger aircraft, however, it soon became possible to provide passengers with luncheon-baskets.

Then Imperial Airways brought into commission the first of their famous Argosy air-liners. These 3-engined aircraft, which initiated the silver-wing service to Paris, were large enough to carry a uniformed steward who served refreshments from a special buffet at the rear of the saloon.

Argosy air-liners were followed in due course by the great 4-motored aircraft of Heracles and Scylla types. In these there is space for a fully-equipped catering service, and the hot meals provided in winter, and the special summer menus which are being served at the present time, are in every way the equal of those provided in first-class restaurants or hotels.

For lunch, for example, passengers have a choice between such dishes as cold roast beef, chicken galantine, lamb cutlets, or York ham. Various special salads are also a feature; there are attractive sweets, together with cheese, toast, biscuits and coffee. Summer dinner menus also provide a pleasing variety of dishes. And whatever drink you fancy, there it is.



DOUBLE LAUNCHING ON THE TYNE

Two new British destroyers, Afridi and Cossack, just before their launching at Messrs. Vickers Armstrong's Yard at Walker-on-Tyne on June 8.

"ENGLISH SAUSAGE" SHOOTS MAN

Lithuanian Farmer's Idea and Its Sequel

For some time past Lithuanian farmers have been victimised by a band of robbers on the high road leading to the district of Shaken. They held up travellers and deprived them of money and valuables.

Recently a farmer from the village of Bubleliai decided to risk the journey. At a bend in the road two masked men leaped from the forest and ordered him to hand over his money.

A brilliant idea struck the farmer. He pulled a formidable looking weapon from his pocket. "Get out of the way," he shouted, "or I'll shoot." Thoroughly taken aback, the two men darted into the wood.

On reaching his journey's end the farmer told everyone how the long hard sausage, which his wife had given him to eat on the way, had struck terror into the robbers. He pocketed the sausage, known in peasant circles as "English Sausage," and set out next evening on the return journey. Having every confidence in the sausage, he refused the offer of a revolver.

Again he was stopped by the robbers. The sausage story had already reached them. "Go ahead and shoot," they jeered. "We're not afraid of your English sausage." The farmer put his hand into his pocket and, to his surprise, drew forth a pistol, which one of his friends had secretly slipped in.

The "sausage" went off and one robber fell. Quickly he was supported into the forest by his friend.

The farmer told the story to his wife when he got home, but she could not understand it. "There is something providential about the English," she said. "Even the sausages which bear their name bring safety and security."

WORLD'S OLDEST COUPLE DIE IN HUNGARY

Within three days both members of what is believed to have been the oldest couple in Europe have died at Gyoenyoes, Hungary.

The man, Josef Reismann, who was 106, died from pneumonia. His wife Maria, aged 100, could not stand the shock, and died from heart failure on the day of his funeral.

NEW CHARING CROSS BRIDGE SHELVED

Explanation by Ministry of Transport

The Charing Cross Bridge scheme, now estimated to cost £32,500,000, has been shelved again, for a year or two at least.

This fact, first foreshadowed in the "Morning Post" four months ago, emerges from an official statement issued by the Ministry of Transport on June 12.

The statement is designed to clear up the misunderstandings which have arisen from Dr. Leslie Burgin's answer in the House of Commons three days before, which apparently contradicted the observations made by Mr. Hore-Belisha, his predecessor, on this subject earlier in the year.

A month ago, Mr. Hore-Belisha told the London County Council that he found it difficult to accept their estimate of £32,500,000; he indicated that financial assistance would be forthcoming; but hinted that, in any case, the schemes would probably be shelved because of the rearmament programme, the steel shortage, and on economic grounds. On June 9 Dr. Burgin said that if the scheme were proceeded with, it would rank for most favourable treatment.

Thus, the statement makes it clear that Mr. Hore-Belisha told the Council that their scheme would receive favourable consideration, if proceeded with. Mr. Burgin, it seems, repeated the earlier part of that statement, but omitted the obvious qualification. Hence the misunderstanding.

No Policy Change

"There has been no change of policy on the part of the Ministry in this matter," the statement emphasised.

The fact remains that the scheme has obviously been turned down again. It is significant to note the increased estimate now given—£32,500,000. At one time £12,000,000 was the figure mentioned.

The cost of the scheme, as many have foreshadowed, is rising every year, due to some extent to the increasing cost of buying property in Central London for a major development scheme of this kind.

Even if steel and labour costs fall after the rearmament programme is finished and the public works programme is resumed, the view is taken now that when the scheme comes forward for practical consideration a year or so hence the cost will be even more formidable—possibly prohibitive.

"TAJ MAHAL" MOSQUE IN LONDON

Minarets of Moslem To Rise In Britain's Capital

Work has begun on the erection in London of a mosque to be modelled on the Taj Mahal.

On a large open site in Mornington Avenue, West Kensington — until recently used as a car park — the Prince of Berar, son of the Nizam of Hyderabad, has laid the foundation stone of the Nizamiah Mosque, which is to be built there at a cost of £100,000. Indian princes, nobles and their wives attended the ceremony.

Sir Abdul Qadir, Chairman of the Nizamiah Mosque Trust, made an address of welcome to the Prince and Princess of Berar.

"Realisation of the dream of some of the sincerest well-wishers of Islam to see the minarets of a house of Moslem worship in this great city," he said, "is made possible by the zeal of the late Lord Headley. It was his good fortune to approach the Nizam, who gave £60,000, of which £28,000 was spent in procuring the site.

"We shall try to build the essential parts of the Mosque with the money in the hands of the Trust, leaving room for further expansion when more funds become available. The real requirements of the Mosque, as a centre of worship and of valuable cultural contacts, will begin when the building is completed, as money will be needed for its upkeep and for the provision of a resident Imam to lead the prayers."

"CORONATION" OVERTIME BREACH OF LAW

The plea that women were worked longer than the prescribed hours in a factory during the week preceding Coronation Day because otherwise the festivities for thousands of people would have been ruined was put forward by a firm at Hull.

Fines totalling £102 were imposed on William Jackson and Sons Ltd., grocers and confectioners, for breaches of the Factory Act. There were 60 summonses, thirteen being for work on Sunday.

It was stated for the firm that because Coronation Day was so near Whitsun it experienced the busiest time it had known for 86 years. Output was increased by 60 per cent.

Employees, actuated by patriotic feelings, decided that they would work on the Sunday and work overtime on other days, and then go to London for the Coronation.

The stipendiary magistrate, Mr. J. R. MacDonald, said that he was sympathetic, but the firm was bound by Act of Parliament.

BORING FOR OIL IN SUSSEX

Possibility of Oil-Containing Pocket 4,500 Feet Down

PROMISING AREA IN GROVE HILL

The first test boring by the Anglo-American Oil Company in this country was formally inaugurated on June 5.

The test well is at Grove Hill, near the village of Hellingly, Sussex, only a few miles from Heathfield, where the railway station was for many years lit by "natural gas."

Here, at the highest point in an eight miles "wrinkle" in the earth's surface, a great 122-feet derrick now towers above pastureland and woods. Beneath it, some 4,000 to 4,500 feet below the surface, there is believed to be a pocket in the rising slope of possible oil-containing layer. Geologists say that if oil was indeed formed, millions of years ago in these strata, that pocket is a natural trap in which it might collect.

"It has been facetiously observed," Mr. F. J. Wolfe, chairman of the company, stated at a luncheon at Horselunges Manor after the opening ceremony, "that he who finds oil in commercial quantities in this country should have a monument erected to him in Trafalgar Square beside that of Nelson.

"The Missing Link"

"We are one of two companies spending money in a serious attempt to fill in the missing link," he proceeded. "So far as my company is concerned, not a penny would have been spent had we been convinced that there was nothing to find."

Suitable conditions had, he explained, been found in the south of England, in the Midlands and in Scotland. Narrowing down their search they had discovered that one of the most promising areas was Grove Hill.

While this particular drilling operation was confined to but a few acres, his company had licences for drilling on about 500 square miles, and had lodged applications for new licences covering a further 2,200 square miles.

Practical Certainty

Lord Apsley, Parliamentary Secretary to the Minister for Co-ordination of Defence, who performed the opening ceremony, emphasized the importance of oil in regard to defence. There was reason, he stated, to believe on scientific grounds that the presence of oil in England was a practical certainty. He expressed his pleasure that the company intended to do everything possible to preserve the natural beauty of the districts in which they were operating.

Drilling has already reached a depth of nearly 200 feet, and analyses of the soil at different depths are being made by chemists and geologists in temporary laboratories on the site. It is expected that at least two months will elapse before the fate of the enterprise can be known.

"EVERY COMFORT BUT A WIFE"

Coroner's Comments on Rich Man's Loneliness

Loneliness was suggested at a Leicester inquest as the reason for the suicide of Mr. Thomas Stirk Rowley, J.P., aged 67, the principal of a large firm of hosiery manufacturers and a newspaper director, who was found shot in his garden.

Mr. Rowley was a bachelor, and the Coroner (Mr. Edward Fowler) returning a verdict that he killed himself while the balance of his mind was disturbed said, "I looked upon him as a man who had every comfort except a wife. He seems to have suffered badly from insomnia and from loneliness, both of which conditions I should have thought could have been remedied."

Mr. Leslie Robertson, a nephew, when asked if Mr. Rowley had been rather lonely in his domestic situation replied, "Yes, he had said so."

The Coroner—I have a letter which was found under his head in which he mentions that. I don't propose to read the letter, but it gives me a guide as to the state of his mind.

Mr. Rowley's father died about six months ago leaving more than £800,000, and under his will Mr. Rowley received £25,000 in cash and a large number of shares in the hosiery company. He lived with a niece.

SIGHT RETURNS AFTER 26 YEARS

Man Sees His Children For The First Time

Gwilyam John, of Ton-yr-efail, lost his sight in a colliery explosion 26 years ago.

He had never seen his children until his sight was suddenly restored to him a short while ago.

Attention was called to the matter at a meeting of the Blind Persons' Committee at Glamorgan County Hall.

Alderman Sydney Cadogan stated that for years the man had been employed as a brushmaker in the Rhondda Blind Institute. He was provided with treatment at the Llwynypia Hospital. An operation by Dr. Gluck opened his right eye.

"One day John went to a conference with his wife," said Alderman Cadogan. "As he bent down to tie up his bootlace he found that he could see the laces. When he stood up he saw his wife for the first time since their marriage, and they hurried home to the children, whom he had never seen."

Councillor Rogers, of Ton-yr-efail, said that in spite of his blindness the man had been active in social work in the district where he lived and had now been elected a member of the district council.

The Committee decided to provide the man with glasses and recommend that he should be employed as a journeyman.

The first increase in prices as a result of the present financial crisis has just been announced. The city of Paris has decided to raise the price of water from Fr. 1.55 to Fr. 2, the new rate to go into effect on July 1.

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CAPITAL:

AUTHORISED	Sts. Currency	$40,000,000
PAID-UP	Sts. Currency	$10,000,000

Successors To
The Ho Hong Bank, Ltd.
The Chinese Commercial Bank, Ltd.
The Oversea-Chinese Bank, Ltd.

Head Office—SINGAPORE

Branches and Correspondents
At Principal Cities of the World

Every description of Banking and Foreign Exchange Business transacted.

C. L. TAN, *Manager.*

YOKOHAMA SPECIE BANK LIMITED

(Established 1880)

CAPITAL (fully paid-up)	Y.100,000,000
RESERVE FUND	Y.132,650,000

Head Office: YOKOHAMA, JAPAN
Shanghai Branch: 24 THE BUND

Branches:

Alexandria	Karachi	Rio de Janeiro
Bangkok	Kobe	Samarang
Batavia	London	San Francisco
Berlin	Los Angeles	Seattle
Bombay	Manila	Shanghai
Calcutta	Moji	Singapore
Canton	Mukden	Sourabaya
Dairen	Nagasaki	Sydney
Hamburg	Nagoya	Tientsin
Hankow	New York	Tokyo
Harbin	Osaka	Tokyo (Marunouchi)
Hongkong	Otaru	
Honolulu	Paris	Yingkow
Hsinking	Peiping	Tsingtao
	Rangoon	

K. YABUKI, *Manager*

東亞銀行

THE BANK OF EAST ASIA LIMITED

(Incorporated in Hongkong)

Head Office: HONGKONG
Shanghai Branch: 299 SZECHUEN ROAD

AUTHORISED CAPITAL	$10,000,000
PAID-UP CAPITAL	5,598,600
RESERVE FUND	2,350,000
UNDIVIDED PROFIT	425,000

Correspondents in all principal cities of the world. Every description of banking business transacted. Safe deposit boxes to rent. Terms on application.

NETHERLANDS TRADING SOCIETY

(Nederlandsche Handel-Maatschappij, N.V. Est. Amsterdam 1824)

BANKERS

Head-Office: AMSTERDAM
Head-Office for the East: BATAVIA
Shanghai Office: Sassoon House, The Bund 20

72 Branches in Holland, the Netherlands East Indies, the Straits Settlements, India, China, Japan, Arabia and Netherlands Guyana, Correspondents in all principal towns of the world.

BANKING BUSINESS OF EVERY DESCRIPTION TRANSACTED

J. DE WILDE, *Manager*

MONEY & EXCHANGE

FOREIGN MONEY RATES

London		June 30.
Fine Bank Bills,	3 months	0 9/16%
Bank Bills,	6 „	0 21/32%
Fine Trade Bills,	3 „	2¼%
Fine Trade Bills,	6 „	2¾%
Call Money		0½%
New York:		
Bankers' Acceptances for		0½%B
1, 2 and 3 months		0 7/16%A
Bankers' Acceptances for		0 9/16%B
4 months		0½%A

—Reuter

FOREIGN EXCHANGES

Bombay Rupee T. T. on: June 30.

Japan	77⅜	London	1/6 3/32
New York	269⅜	„ 2 mths	
Shanghai	81	„ (sellers)	1/6 3/32
Hongkong	82½	„ (buyers)	1/6⅛

London £ Sterling T. T. on:

New York	493.85	Shanghai	1/2½
Paris	unq.	Bombay	1/6⅛
Berlin	12.30¼	Hongkong	1/2 11/16
Amsterdam	8.98⅞	Singapore	2/4 3/16
Brussels	29.32½	Yokohama	1/1 63/64
Madrid	87.50 N	„ (buying)	1/1 61/64
Milan	93.82	C'Slovakia	141.56
Berne	21.58½		

New York U.S.$ T. T. on:

Berlin	40.08	Japan	28.71
Spain	5.00	Shanghai	29.80
Holland	54.91½	Austria	18.75
Paris	4.10	C'Slovakia	3.48⅝
Brussels	16.83¾	Hungary	19.75
Italy	5.26¼	Rumania	0.74
S'zerland	22.87	Yugo Slavia	2.33
Sweden	25.45	Greece	0.90⅝
Norway	24.80	Bulgaria	1.35
Denmark	22.05	Finland	2.18
Montreal	99 23/32	Poland	18.95
Brazil	8.32		

London	4.93 11/16
„ Commercial 60 days bills	4.92 7/16
„ Bankers' 60 days bills	4.92 13/16
Buenos Aires Paper	30.62
Buenos Aires Paper, Market rate	30.25
Montreal on London	4.95

Reuter.

JOINT RESERVE BOARD

Member Bank Clearings

THURSDAY, JUNE 30, 1937

Inter-Member Bank Clearings	$ 85,361,107.60
Member Bank Transfer ..	$146,402,937.82
Collections From non Member Banks Native Banks and Firms	$ 13,699,813.93
Total	$245.463,859.35

Yesterday's Discount Rates

Bankers Acceptance (90 days) per day per $1,000	12 cts.
Call Money Against Joint Reserve Notes per day per $1,000	11 cts.

BRITISH COMMODITIES

Wednesday's Closing Quotations

London, June 30.

Principal British commodity markets ruled extremely quiet and there was practically no special feature.—Reuter.

London Rubber: Spot, buyers 9 7/16 —1/16; sellers 9 9/16 —1/16; July delivery, buyers 9½ unchanged sellers 9 9/16 —1/16.
London Sugar (Buyers): August 6/7¾ unch; December 6/8 unch; Mar. 6/9½ —¼.
Liverpool Wheat: July 9/4 —1⅛; Oct. 9/4⅜ —1⅛; Dec. 9/4⅛ —1⅛.
Liverpool Cotton: Amer. Futures: July 6.75 —1; Oct. 6.82 unch; Dec. 6.81 unch; Jan. 6.82 +1; Egyptian Futures (Sakels, F.G.F.): July 9.46 —6; Aug. 9.46 —6; Sept. 9.56 —6.
London Metals: Copper, Standard, cash sellers £54¼ —¼; 3 mths sellers £53⅞ —⅞; Electrolytic, buyers £61 unch; sellers £63 unch; Tin, Standard, cash sellers £253 —¾; 3 mths sellers £252¾ —½; Lead, Foreign, official prices £23 7/16 +3/16; 3 mths delivery £23⅛ +⅛; Spelter, ordinary, official prices £21 11/16 +¼; 3 mths delivery £21 11/16 +3/16.—Reuter.

U.S. COMMODITIES

Wednesday's Closing Quotations

New York, June 30.

Trading in the cotton market was inactive, with July early declinging on selling against fifty notices issued, while other options were steady. Later, the market moderately advanced on steady Liverpool advices and some foreign, trade and commission house buying, but then reacted on the favourable weekly weather report and in sympathy with wheat. Closing quotations ranged from 5 to 12 points down from yesterday.

Quiet but steadier conditions prevailed in the rubber market in spite of the unencouraging action of the London market, while speculative absorption was induced by the firmness of the stock market. At the last call-over, gains of 5 to 11 points were recorded.

Trading in the Chicago Wheat Pit to-day was an extremely erratic affair. Early strength was induced by the bullish Canadian crop and weather reports, but eventually prices reacted under hedge pressure, heavy movement reports, increased spring wheat prospects and enormous profit-taking. At the final bell losses from 2 to 2⅜ cents were registered.

The sugar market declined on European and commission house selling, liquidation of July on circulation of 92 notices and slightly easier London advices. There was, however, some trade and Cuban buying on the scale-down. At the end of the day's trading, No. 4 contract ranged from ½ to 1½ points down from the previous day.

Higher prices in the silk market were influenced by encouraging cables, expectations of favourable statistics for June and reports of fair business in the spot market. Speculative demand and buying is credited to arbitrary accounts, while there was importers and dealer selling reported. At the close, advances of 2½ to 4½ cents were disclosed.—Reuter.

New York Cotton			New York Rubber		
July	12.04-05	—12	July	19.26 N.	+11
Oct.	12.11-11	—09	Sept.	19.44B-47A	+07
Dec.	12.09-09	—07	Dec.	19.62-63	+07
Jan.	12.12-12	—08	Mar.	19.80-80	+08
Mar.	12.19-19	—05	May	19.94 N.	+05
May	12.20-20	—05			

New York Sugar			New York Silk		
Sept.	1.22-22½ B/A	—1½	July	1.84-84	+4½

Chicago Wheat			Chicago Corn (New Contr.)		
July	118⅞-119	—2	July	124¾-125⅛	—2⅜
Sept.	120⅛-119⅞	—2¼	Sept.	110½-110¾	—1⅞
Dec.	121⅞-122	—2⅜	Dec.	78½-78¾	—1¼

Winnipeg Wheat			Montreal Silver		
Oct.	130⅞-131	—4⅜	Sept.	44.35B-70A	+15

B—Bid A—Asked.—Reuter.

Review of the Week

Market report received from Messrs. Anderson, Clayton & Fleming:

New York, June 30.

"Easier tone due to liquidation and smaller volume of price fixation by mills. Crop prospects very favourable over practically the entire cotton belt, though there are some complaints of boll weevil in the Eastern belt."

JAPANESE GOVT. BONDS

Osaka, July 1.

Kogo 5%	Y.101.63
3rd Series, 5% (Red. 1985-88)	102.05

—Reuter.